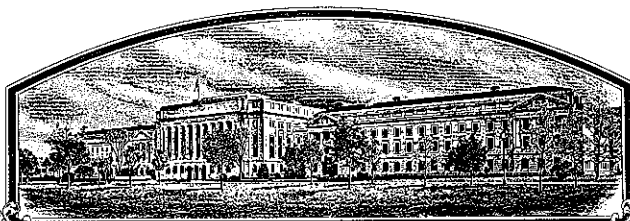


No.

9000205



# THE UNITED STATES OF AMERICA

TO ALL TO WHOM THESE PRESENTS SHALL COME:

**Latham Seed Co.**

Whereas, THERE HAS BEEN PRESENTED TO THE  
**Secretary of Agriculture**

AN APPLICATION REQUESTING A CERTIFICATE OF PROTECTION FOR AN ALLEGED NOVEL VARIETY OF SEXUALLY REPRODUCED PLANT, THE NAME AND DESCRIPTION OF WHICH ARE CONTAINED IN THE APPLICATION AND EXHIBITS, A COPY OF WHICH IS HEREUNTO ANNEXED AND MADE A PART HEREOF, AND THE VARIOUS REQUIREMENTS OF LAW IN SUCH CASES MADE AND PROVIDED HAVE BEEN COMPLIED WITH, AND THE TITLE THERETO IS, FROM THE RECORDS, OF THE PLANT VARIETY PROTECTION OFFICE, IN THE APPLICANT(S) INDICATED IN THE SAID COPY, AND WHEREAS, UPON DUE EXAMINATION MADE, THE SAID APPLICANT(S) IS (ARE) ADJUDGED TO BE ENTITLED TO A CERTIFICATE OF PLANT VARIETY PROTECTION UNDER THE LAW.

NOW, THEREFORE, THIS CERTIFICATE OF PLANT VARIETY PROTECTION IS TO GRANT UNTO THE SAID APPLICANT(S) AND THE SUCCESSORS, HEIRS OR ASSIGNS OF THE SAID APPLICANT(S) FOR THE TERM OF *eighteen* YEARS FROM THE DATE OF THIS GRANT, SUBJECT TO THE PAYMENT OF THE REQUIRED FEES AND PERIODIC REPLENISHMENT OF VIABLE BASIC SEED OF THE VARIETY IN A PUBLIC REPOSITORY AS PROVIDED BY LAW, THE RIGHT TO EXCLUDE OTHERS FROM SELLING THE VARIETY, OR OFFERING IT FOR SALE, OR REPRODUCING IT, IMPORTING IT, OR EXPORTING IT, OR USING IT IN PRODUCING A HYBRID OR DIFFERENT VARIETY THEREFROM, TO THE EXTENT PROVIDED BY THE PLANT VARIETY PROTECTION ACT (ACT, 1542, AS AMENDED, 7 U.S.C. 2321 ET SEQ.)

SOYBEAN

'38735L'



In Testimony Whereof, I have hereunto set  
my hand and caused the seal of the Plant  
Variety Protection Office to be affixed  
at the City of Washington, D.C.  
this 31st day of August in  
the year of our Lord one thousand nine  
hundred and ninety-four.

Attest:

*Kenneth Hoans*

Commissioner

Plant Variety Protection Office  
Agricultural Marketing Service

*Mike Eszy*  
Secretary of Agriculture

U.S. DEPARTMENT OF AGRICULTURE  
AGRICULTURAL MARKETING SERVICE

**APPLICATION FOR PLANT VARIETY PROTECTION CERTIFICATE**  
(Instructions on reverse)

Application is required in order to determine if a plant variety protection certificate is to be issued (7 U.S.C. 2421). Information is held confidential until certificate is issued (7 U.S.C. 2426).

1. NAME OF APPLICANT(S) (as it is to appear on the Certificate) <b>Latham Seed Company</b>		2. TEMPORARY DESIGNATION OR EXPERIMENTAL NO.	3. VARIETY NAME <b>38735L</b>
4. ADDRESS (street and no. or R.F.D. no., city, state, and ZIP) <b>Route 1, Box 12 Alexander, IA 50420</b>		5. PHONE (include area code) <b>515/692-3258</b>	<b>FOR OFFICIAL USE ONLY</b> PVPO NUMBER <b>9000205</b> FILING Date <b>June 11, 1990</b> Time <input checked="" type="checkbox"/> A.M. <input type="checkbox"/> P.M. FEE Filing and Examination Fee: <b>\$ 2150.-</b> Date <b>June 11, 1990</b> RECIPIENT Certificate Fee: <b>\$ 250.00</b> Date <b>July 25, 1994</b>
6. GENUS AND SPECIES NAME <b>Glycine max L.</b>	7. FAMILY NAME (Botanical) <b>Leguminosae</b>		
8. CROP KIND NAME (Common Name) <b>Soybean</b>	9. DATE OF DETERMINATION <b>October 1988</b>		
10. IF THE APPLICANT NAMED IS NOT A "PERSON," GIVE FORM OF ORGANIZATION (Corporation, partnership, association, etc.) <b>Corporation</b>			
11. IF INCORPORATED, GIVE STATE OF INCORPORATION <b>Iowa</b>		12. DATE OF INCORPORATION <b>September 1980</b>	
13. NAME AND ADDRESS OF APPLICANT REPRESENTATIVE(S), IF ANY, TO SERVE IN THIS APPLICATION AND RECEIVE ALL PAPERS <b>Willard J. Latham Route 1, Box 12 Alexander, IA 50420</b>			

PHONE (include area code): **515/692-3258**

14. CHECK APPROPRIATE BOX FOR EACH ATTACHMENT SUBMITTED (Follow INSTRUCTIONS on reverse)

a. ☒ Exhibit A, Origin and Breeding History of the Variety.

b. ☒ Exhibit B, Novelty Statement.

c. ☒ Exhibit C, Objective Description of Variety.

d. ☐ Exhibit D, Additional Description of Variety.

e. ☒ Exhibit E, Statement of the Basis of Applicant's Ownership.

f. ☒ Seed Sample (2,500 viable untreated seeds). Date Seed Sample mailed to Plant Variety Protection Office **May 30, 1990**

g. ☒ Filing and Examination Fee (\$2,150) made payable to "Treasurer of the United States."

15. DOES THE APPLICANT(S) SPECIFY THAT SEED OF THIS VARIETY BE SOLD BY VARIETY NAME ONLY AS A CLASS OF CERTIFIED SEED? (See section 83(a) of the Plant Variety Protection Act.)  
☐ YES (If "YES," answer items 16 and 17 below) ☒ NO (If "NO," skip to item 18 below)

16. DOES THE APPLICANT(S) SPECIFY THAT THIS VARIETY BE LIMITED AS TO NUMBER OF GENERATIONS?  
☐ YES ☒ NO

17. IF "YES" TO ITEM 16, WHICH CLASSES OF PRODUCTION BEYOND BREEDER SEED?  
☐ FOUNDATION ☐ REGISTERED ☐ CERTIFIED

18. DID THE APPLICANT(S) PREVIOUSLY FILE FOR PROTECTION OF THE VARIETY IN THE U.S.?  
☐ YES (If "YES," through ☐ Plant Variety Protection Act ☐ Patent Act. Give date: \_\_\_\_\_) ☒ NO

19. HAS THE VARIETY BEEN RELEASED, USED, OFFERED FOR SALE, OR MARKETING IN THE U.S. OR OTHER COUNTRIES?  
☐ YES (If "YES," give names of countries and dates) ☒ NO

20. The applicant(s) declare(s) that a viable sample of basic seeds of this variety will be furnished with the application and will be replenished upon request in accordance with such regulations as may be applicable.

The undersigned applicant(s) is (are) the owner(s) of this sexually reproduced novel plant variety, and believe(s) that the variety is distinct, uniform, and stable as required in section 41, and is entitled to protection under the provisions of section 42 of the Plant Variety Protection Act.

Applicant(s) is (are) informed that false representation herein can jeopardize protection and result in penalties.

SIGNATURE OF APPLICANT (Owner(s)) <b>Willard J. Latham</b>	CAPACITY OR TITLE <b>President</b>	DATE <b>6-6-90</b>
SIGNATURE OF APPLICANT (Owner(s))	CAPACITY OR TITLE	DATE

## Exhibit A

## Origin and Breeding History: 38735L

38735L is a soybean cultivar derived from a cross of (Corsoy \* Hark) \* A3127 by the pedigree method of breeding.

<u>Generation</u>	<u>Step</u>	<u>Year</u>
F <sub>0</sub>	Handcross	1980
F <sub>1</sub>	F <sub>1</sub> Increase	1981
F <sub>2</sub>	Selection	1982
F <sub>3</sub>	Advance	1983
F <sub>4</sub>	Advance	1984
F <sub>5</sub>	Yield Test	1985
F <sub>6</sub>	Yield Test	1986
F <sub>7</sub>	Yield Test	1987
	Purify for Hilum Color	
F <sub>8</sub>	Yield Test	1988
	Increase	
F <sub>9</sub>	Yield Test	1989
	Increase	

Observations indicate that 38735L is uniform and stable within commercially acceptable limits. As is true with other soybean varieties, a small percentage of offtypes or variants can occur within commercially acceptable limits for almost any characteristic during the course of repeated multiplication.

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**Exhibit B**

**Novelty Statement: 38735L**

**38735L is most similar to A3127. The main difference between 38735L and A3127 includes, but is not necessarily restricted to the following:**

- 1. 38735L is 9 days earlier**

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## EXHIBIT B: Novelty Statement (Addendum)

The soybean cultivar '38735L' is described in the table below in the first line. The comparison cultivars and the traits they differ in are listed below that.

Cultivar	Seed		Leaf Shape	Leaf Color	Plant Type	Mat Group	Brown Stem	PRR Rl	Iron Chlor
	Shape	Coat Luster							
38735L	SPHER	DULL	OVATE	DKGR	MED	II	1	1	1
A3127		SHINY				III			
A3585		SHINY		MDGR	BUSHY	III			
A3659						III			
A3966					BUSHY	III			
DUKE		SHINY			SLEND.			2	
LAKOTA						I		2	2
A3427	SPFLAT					III		2	
CX326	SPFLAT					III		2	
A3511	SPFLAT					III		2	
DSR-287		SHINY		MDGR					
A3733						II	2		
CX366	SPFLAT				BUSHY	III		2	
HS339	SPFLAT				BUSHY	III			
A2234	SPFLAT				BUSHY			2	
9331	SPFLAT	SHINY				III		2	
9391	SPFLAT	SHINY		MDGR		III		2	
A3501						III		2	
RESNIK	ELONG.			MDGR		III		2	
GR8836	SPFLAT				BUSHY	III		2	
9301		SHINY				III			
CX298				MDGR				2	
34870	SPFLAT		OVAL		BUSHY				
8628SE	SPFLAT				BUSHY				
A2543	SPFLAT				BUSHY			2	
DSR-170	ELONG.	SHINY				I			
BPR-2140	ELONG.							2	2
CX329		SHINY		MDGR		II		2	

U.S. DEPARTMENT OF AGRICULTURE  
 AGRICULTURAL MARKETING SERVICE  
 LIVESTOCK, MEAT, GRAIN & SEED DIVISION  
 PLANT VARIETY PROTECTION OFFICE  
 BELTSVILLE, MARYLAND 20705

EXHIBIT C  
 (Soybean)

OBJECTIVE DESCRIPTION OF VARIETY  
 SOYBEAN (*Glycine max* L.)

NAME OF APPLICANT(S) Eatham Seed Company	TEMPORARY DESIGNATION	VARIETY NAME 38735L
ADDRESS (Street and No., or R.F.D. No., City, State, and Zip Code) Route 1, Box 12 Alexander, IA 50420		FOR OFFICIAL USE ONLY PVPO NUMBER 9000205

Choose the appropriate response which characterizes the variety in the features described below. When the number of significant digits in your answer is fewer than the number of boxes provided, place a zero in the first box when number is 9 or less (e.g.,   ).

## 1. SEED SHAPE:



1 = Spherical (L/W, L/T, and T/W ratios = < 1.2)  
 3 = Elongate (L/T ratio > 1.2; T/W = < 1.2)

2 = Spherical Flattened (L/W ratio > 1.2; L/T ratio = < 1.2)  
 4 = Elongate Flattened (L/T ratio > 1.2; T/W > 1.2)

## 2. SEED COAT COLOR: (Mature Seed)

1 = Yellow

2 = Green

3 = Brown

4 = Black

5 = Other (Specify) \_\_\_\_\_

## 3. SEED COAT LUSTER: (Mature Hand Shelled Seed)

1 = Dull ('Corsoy 79'; 'Braxton')

2 = Shiny ('Nebsoy'; 'Gasoy 17')

## 4. SEED SIZE: (Mature Seed)

Grams per 100 seeds

## 5. HILUM COLOR: (Mature Seed)

1 = Buff

2 = Yellow

3 = Brown

4 = Gray

5 = Imperfect Black

6 = Black

7 = Other (Specify) \_\_\_\_\_

## 6. COTYLEDON COLOR: (Mature Seed)

1 = Yellow

2 = Green

## 7. SEED PROTEIN PEROXIDASE ACTIVITY:

1 = Low

2 = High

## 8. SEED PROTEIN ELECTROPHORETIC BAND:

1 = Type A (SP1<sup>a</sup>)2 = Type B (SP1<sup>b</sup>)

## 9. HYPOCOTYL COLOR:

1 = Green only ('Evans'; 'Davis')

2 = Green with bronze band below cotyledons ('Woodworth'; 'Tracy')

3 = Light Purple below cotyledons ('Beeson'; 'Pickett 71')

4 = Dark Purple extending to unifoliate leaves ('Hodgson'; 'Coker Hampton 266A')

## 10. LEAFLET SHAPE:

1 = Lanceolate

2 = Oval

3 = Ovate

4 = Other (Specify) \_\_\_\_\_

5

11. LEAFLET SIZE:

☐ 2

1 = Small ('Amsoy 71'; 'A5312')  
3 = Large ('Crawford'; 'Tracy')

2 = Medium ('Corsoy 79'; 'Gasoy 17')

12. LEAF COLOR:

☐ 3

1 = Light Green ('Weber'; 'York')  
3 = Dark Green ('Gnome'; 'Tracy')

2 = Medium Green ('Corsoy 79'; 'Braxton')

13. FLOWER COLOR:

☐ 2

1 = White

2 = Purple

3 = White with purple throat

14. POD COLOR:

☐ 1

1 = Tan

2 = Brown

3 = Black

15. PLANT PUBESCENCE COLOR:

☐ 2

1 = Gray

2 = Brown (Tawny)

16. PLANT TYPES:

☐ 2

1 = Slender ('Essex'; 'Amsoy 71')  
3 = Bushy ('Gnome'; 'Govan')

2 = Intermediate ('Amcor'; 'Braxton')

17. PLANT HABIT:

☐ 3

1 = Determinate ('Gnome'; 'Braxton')

2 = Semi-Determinate ('Will')

3 = Indeterminate ('Nebsoy'; 'Improved Pelican')

18. MATURITY GROUP:

☐ 05

1 = 000  
9 = VI

2 = 00  
10 = VII

3 = 0  
11 = VIII

4 = I  
12 = IX

5 = II  
13 = X

6 = III

7 = IV

8 = V

19. DISEASE REACTION: (Enter 0 = Not Tested; 1 = Susceptible; 2 = Resistant)

BACTERIAL DISEASES:

☐ 0

Bacterial Pustule (*Xanthomonas phaseoli* var. *sojensis*)

☐ 1

Bacterial Blight (*Pseudomonas glycinea*)

☐ 0

Wildfire (*Pseudomonas tabaci*)

FUNGAL DISEASES:

☐ 1

Brown Spot (*Septoria glycines*)

Frogeye Leaf Spot (*Cercospora sojae*)

☐ 0

Race 1

☐ 0

Race 2

☐ 0

Race 3

☐ 0

Race 4

☐ 0

Race 5

☐

Other (Specify)

☐ 0

Target Spot (*Corynespora cassiicola*)

☐ 2

Downy Mildew (*Peronospora trifoliorum* var. *manshurica*)

☐ 2

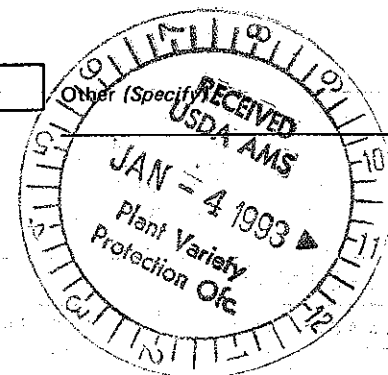
Powdery Mildew (*Microsphaera diffusa*)

☐ 1

Brown Stem Rot (*Cephalosporium gregatum*)

☐ 0

Stem Canker (*Diaporthe phaseolorum* var. *caulivora*)



## FUNGAL DISEASES: (Continued)

<input type="text" value="2"/>	Pod and Stem Blight ( <i>Diaporthe phaseolorum</i> var; <i>sojae</i> )												
<input type="text" value="2"/>	Purple Seed Stain ( <i>Cercospora kikuchii</i> )												
<input type="text" value="0"/>	Rhizoctonia Root Rot ( <i>Rhizoctonia solani</i> )												
Phytophthora Rot ( <i>Phytophthora megasperma</i> var. <i>sojae</i> )													
<input type="text" value="1"/>	Race 1	<input type="text" value="0"/>	Race 2	<input type="text" value="0"/>	Race 3	<input type="text" value="1"/>	Race 4	<input type="text" value="0"/>	Race 5	<input type="text" value="0"/>	Race 6	<input type="text" value="1"/>	Race 7
<input type="text" value="0"/>	Race 8	<input type="text" value="0"/>	Race 9	<input type="text" value="0"/>	Other (Specify) _____								

## VIRAL DISEASES:

<input type="text" value="0"/>	Bud Blight (Tobacco Ringspot Virus)
<input type="text" value="0"/>	Yellow Mosaic (Bean Yellow Mosaic Virus)
<input type="text" value="0"/>	Cowpea Mosaic (Cowpea Chlorotic Virus)
<input type="text" value="0"/>	Pod Mottle (Bean Pod Mottle Virus)
<input type="text" value="2"/>	Seed Mottle (Soybean Mosaic Virus)

## NEMATODE DISEASES:

Soybean Cyst Nematode ( <i>Heterodera glycines</i> )									
<input type="text" value="0"/>	Race 1	<input type="text" value="0"/>	Race 2	<input type="text" value="1"/>	Race 3	<input type="text" value="1"/>	Race 4	<input type="text" value="0"/>	Other (Specify) _____
<input type="text" value="0"/>	Lance Nematode ( <i>Hoplolaimus Colombus</i> )								
<input type="text" value="0"/>	Southern Root Knot Nematode ( <i>Meloidogyne incognita</i> )								
<input type="text" value="0"/>	Northern Root Knot Nematode ( <i>Meloidogyne Hapla</i> )								
<input type="text" value="0"/>	Peanut Root Knot Nematode ( <i>Meloidogyne arenaria</i> )								
<input type="text" value="0"/>	Reniform Nematode ( <i>Rotylenchulus reniformis</i> )								
<input type="text" value="0"/>	OTHER DISEASE NOT ON FORM (Specify): _____								

## 20. PHYSIOLOGICAL RESPONSES: (Enter 0 = Not Tested; 1 = Susceptible; 2 = Resistant)

<input type="text" value="1"/>	Iron Chlorosis on Calcareous Soil
<input type="text" value="0"/>	Other (Specify) _____

## 21. INSECT REACTION: (Enter 0 = Not Tested; 1 = Susceptible; 2 = Resistant)

<input type="text" value="0"/>	Mexican Bean Beetle ( <i>Epilachna varivestis</i> )
<input type="text" value="0"/>	Potato Leaf Hopper ( <i>Empoasca fabae</i> )
<input type="text" value="0"/>	Other (Specify) _____

## 22. INDICATE WHICH VARIETY MOST CLOSELY RESEMBLES THAT SUBMITTED.

CHARACTER	NAME OF VARIETY	CHARACTER	NAME OF VARIETY
Plant Shape	A3127	Seed Coat Luster	--
Leaf Shape	--	Seed Size	--
Leaf Color	--	Seed Shape	--
Leaf Size	--	Seedling Pigmentation	--

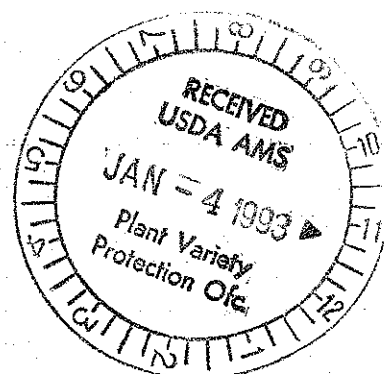


23. GIVE DATA FOR SUBMITTED AND SIMILAR STANDARD VARIETY: Paired Comparison Data

VARIETY	NO. OF DAYS MATURITY	PLANT LODGING SCORE	CM PLANT HEIGHT	LEAFLET SIZE		SEED CONTENT		SEED SIZE G/100 SEEDS	NO. SEEDS/POD
				CM Width	CM Length	% Protein	% Oil		
387351 Submitted	273	1.4	--	--	--	--	--	--	--
A3127 Name of Similar Variety	282	1.7	--	--	--	--	--	--	--

PUBLICATIONS USEFUL AS REFERENCE AIDS FOR COMPLETING THIS FORM:

1. Caldwell, B.E., ed. 1973. Soybeans: Improvement, Production, and Uses. Amer. Soc. Agron. Monograph No. 16.
2. Buttery, B.R. and R.I. Buzzell. 1968. Peroxidase activity in seeds of soybean varieties. Crop Sci., 8: 722-725.
3. Hymowitz, T. 1973. Electrophoretic analysis of SBTI-A<sub>2</sub> in the USDA soybean germplasm collection. Crop Sci., 13: 420-421.
4. Payne, R.C. and L.F. Morris. 1976. Differentiation of soybean cultivars by seedling pigmentation patterns. J. Seed Technol. 1: 1-19.



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Exhibit E

Statement of the Basis of Applicant's Ownership: 38735L

38735L was developed by Latham Seed Company. By agreement between Latham Seed Company and its employees, all rights of invention, discovery, or development made by an employee are assigned to the Company. No rights to such invention, discovery, or development are retained by any employees.